THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI JAI PRAKASH NARAYAN YADAV): (a) The Government of Chhattisgarh has informed that no water rights on any river in Chhattisgarh has been handed over to private consortia.

- (b) Does not arise.
- (c) State Governments have not informed about handing over of any of the rivers in the country to private consortia.
 - (d) No, Sir.

Ground water level in Maharashtra

- 1479. SHRI MANOHAR JOSHI: Will the Minister of WATER RESOURCES be pleased to state:
- (a) whether Government are aware that level of ground water has gone very low in various States specially in Maharashtra and farmers find it difficult to get water for irrigation;
- (b) if so, the details of States from where the Central Government has received reports in this regard; and
 - (c) the steps being taken to recharge the water level in the States?
- THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI JAI PRAKASH NARAYAN YADAV): (a) Yes, Sir, Government is aware that the ground water levels on certain parts of various States including Maharashtra have declined significantly.
- (b) Central Ground Water Board (CGWB) monitors ground water levels on regional scale through a network of 15,640 observation wells. Long term water level data are utilized by the Board in assessment of ground water resources and categorization of areas. As per the joint assessment of ground water resources carried out by the Central Ground Water Board and the States, out of 5723 replenishable ground water resource assessment units (block/mandal/taluka), 839 units are 'over-exploited' where stage of ground water development is more than 100% and significant decline in long term trend of water level has been observed in either pre-monsoon period or post-monsoon period or both. A total of 226 units are

'critical' where ground water development is more than 90% and upto 100% and significant decline is observed in long term trend of water level in both premonsoon and post-monsoon period. State-wise number of units falling under 'Over-exploited' and 'Critical' categories is given in the Statement [Refer to the Statement appended to the answer to Unstarred Question No. 1464 Part(a)]

- (c) The following steps are being taken by the Government to recharge the ground water levels in various States:
 - (i) A report titled 'Master Plan for Artificial Recharge to Ground Water' has been prepared which has identified a total of 4.5 lakh sq.km. area in the country needing artificial recharge of ground water. The document has been circulated to all the States/UTs for appropriate action.
 - (ii) The CGWB has circulated Manual/Guide on techniques of Artificial Recharge to Ground Water to the States/Union Territories to enable them to formulate area specific artificial recharge schemes to check the declining trend of ground water level.
 - (iii) CGWB promotes rain water harvesting by conducting mass awareness/training programmes and provides technical guidance to various Government and Non-Government agencies.
 - (iv) Ministry of Water Resources has circulated a Model Bill to "Regulate and Control the Development and Management of Ground Water" to the States/Union Territories. The Model Bill has a separate chapter on 'Rain Water Harvesting for Ground Water Recharge'.
 - (v) The Union Government has constituted "Artificial Recharge of Ground Water Advisory Council" under the Chairmanship of Union Minister for Water Resources in the Ministry of Water Resources, which has representation from various Ministries/Departments concerned with rain water harvesting, States/UTs, Financial Institutions, Industries/Public Undertakings as well as NGOs and renowned Subject Experts.
 - (vi) The Central Ground Water Authority (CGWA) has directed the Chief Secretaries of the concerned States to take all measures to adopt artificial recharge to ground water/promote rain water

- harvesting in all the Over-exploited areas falling under their jurisdiction and ensure inclusion of roof top rain water harvesting in the building bye-laws.
- (vii) CGWA has notified 20 severely over-exploited areas in the country for regulation of ground water development and management. The CGWA is also regulating development of ground water by new industries/ projects in all over-exploited/critical areas.

Demand and supply of water

- 1480. DR. M.A.M. RAMASWAMY: Will the Minister of WATER RESOURCES be pleased to state:
 - (a) whether the demand for water in the country is increasing every year;
 - (b) if so, the availability of demand and supply of water in the country; and
- (c) the steps taken by Government to improve the quality of water in the country?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI JAI PRAKASH NARAYAN YADAV): (a) Yes, Sir.

- (b) The average annual precipitation is estimated as 4000 billion cubic metre (BCM) in the country. After accounting for the natural process of evaporation etc., the average annual water availability in the country is assessed as 1869 BCM. It is estimated that owing to topographic, hydrological and other constraints, the utilizable water is 1123 BCM out of which 690 billion cubic metre is surface water and 433 BCM is replenishable ground water. The National Commission for Integrated Water Resources Development Plan in its report has projected the estimates of total annual water requirements for various scenarios. The estimated water requirements for the year 2010, 2025 and 2050 are 710 BCM, 843 BCM and 1180 BCM respectively under high demand scenario.
- (c) In respect of Water Quality, the National Water Policy, 2002 provides as under:
 - "14.1 Both surface water and ground water should be regularly monitored for quality. A phased programme should be undertaken for improvements in water quality.